A COMPARATIVE STUDY OF THE THREE TYPES OF HIGH SCHOOLS IN KANSAS BY COUNTIES

by

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INTRODUCTION

For the past decade an unusual amount of discussion in educational and political circles has centered around the question of the relative merits of the three permissive laws by which high schools may be established and maintained in the State of Kansas.

Often-times the antagonists and protagonists of a certain legal enactment are influenced by a prejudice and base their conclusions on conditions peculiar to their own communities or counties.

The rapid increase in high school enrollment and the added expenditure incident thereto have heightened the importance of this issue to a degree where opinion and speculation no longer suffice.

The fact that in the past two decades the enrollment in high schools has doubled twice, an increase of 210 percent with a corresponding increase of but 47 percent in population constitutes one of the most remarkable social phenomena in the history of education

In Kansas the high schools are characterized by

lack of system and uniformity in matters pertaining to maintenance, administration and supervision. This condition has been brought about as the result of several causes chief among which are the following: First, the division of authority between the state University and the state Superintendent of Schools; the fact that a large percentage of the high schools of Kansas were established without legal sanction or specific legal provisions and because of the variety of laws under which a county might choose to build and maintain its high schools.

As the three laws were essentially different, conditions in the three groups of counties are peculiar to the type of administration which each law provides.

Which law has best served the purpose for which it was intended, namely, the education of all the children of the state?

The answer to this question may be found by comparing the three groups of counties in respect to the several factors which combine to make for efficiency in education.

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THE AIM IN VIEW.

The chief aim of this investigation is to ascertain the strength and effectiveness of each law providing for establishing and maintaining of high schools in Kansas.

It aims to show also the respects in which a law is failing to produce the effect or accomplish the purpose for which it was placed on the statute books.

It purposes to emphasize the importance of careful measurements of the results of legislation after a study of the whole field has been made rather than by examining single localities.

To this end not only are the counties ranked with reference to the law which they have adopted but counties are grouped according to the same categories in order that the results of the tests may be based on facts resulting from a study of conditions covering the widest possible area.

Many of the futile arguments which arise in our legislative bodies and which continue to fill the columns of the daily press over the relative merits

or the absolute unfairness of certain laws may be largely settled by careful study and analysis. It is the aim of this study to offer a method for the settlement of such controversies.

SEVEN TESTS OF EFFICIENCY

The seven tests which are the bases of comparison of the three types of high schools in Kansas are the following:

First. Percentage of the school population in the county who are attending the high school

Second. Persistence of attendance or the percentage of the high school attendance which reached the junior or senior year.

Third. Qualifications of high school teachers based on their scholastic preparation.

Fourth. The average salary paid to high school teachers.

Fifth. The average salary of high school principals and superintendents.

Sixth. Breadth of curriculum or range of opportunity in selection of subjects.

Seventh. Library facilities.

These seven tests are applied to the high schools of Kansas in the belief that each may be used to measure one of the chief factors which combine to make for efficiency in secondary education. It is not contended that the seven tests which have been enumerated are the only tests which should or may be taken into consideration in ascertaining school efficiency. There are many others which if the information were available and all conditions favorable might be used with greater effectiveness and more scientifically accurate results.

On the other hand in any scheme of evaluating the work of a school the product of which in the final form is necessarily intangible these seven tests are indispensable and so significant and vital are the questions which they ask that the addition of other tests and the averaging of their results would not in all probability alter final conclusions.

The first test calls for the percentage of the total school population who are attending high school. This test is applied on the theory that a school can not be effective unless it can come into contact with the people whom it expects to influence. The second test goes somewhat farther and inquires, What proportion of those who enter the high school remain at their tasks until the junior or the senior year is reached? It is obvious that a school that carries its students over the entire journey is more effective than the one which tends to lose them at the half-way line.

The third which tests for the qualification of teachers calls for no comment. The teacher who has not made sufficient preparation herself cannot prepare others.

Tests four and five show the average salaries paid to high school teachers and supervisors respectively. The relevancy of these tests is predicated on the theory that in a competitive world one will pay for what one gets and get what one pays for. Good teachers will seek good pay and places which pay good salaries will seek good teachers.

The sixth test is an investigation of the opportunities afforded to secure a range of selection of subjects from the newer educational material that has gained admittance to the curriculum in the past quarter of a century in Kansas.

The last study applied to the high schools of the state concerns itself with the library, no doubt the most neglected field in secondary education. In the greatest reading age of all time no student can be considered educated who does not have a cultivated reading habit.

LEGAL PROVISIONS

General Law of 1876.

The first high school legislation in Kansas was very general in nature. The first law which was passed on March 4, 1876 gave boards of education in cities of the first and second class, power, "To establish a high school whenever in their opinion the educational interests of the city demand the same". Article X. Section 4 of the school laws of 1876 provides as follows: "The board of education shall have power to select their own officers; to make their rules and regualtions, subject to the provisions of this act; to establish a high school whenever in

their opinion the educational interests of the city demand the same: and to exercise the sole control over the public schools and school property of the city. No provision was made for cities of the third class to build high schools although these smaller cities did establish high schools at a very early date. It will be observed from the text of the law that school boards are given considerable liberty in establishing high schools of whatever nature and by what means they see fit. For this reason this law has been commonly known as the "general" law to distinguish it from later legal provisions.

COUNTY HIGH SCHOOL LAW 1886

Section I of this act states the aim and purpose of the law; "Each county having a population of six thousand inhabitants (changed to 2500 in 1897) or over, as shown by the last federal census, may establish a county high school on the conditions and in the manner herein after prescribed, for the purpose of affording better educational facilities for pupils more advanced than those attending the district schools and for persons desiring

to fit themselves for the profession of teaching." "There shall be provided three courses of instruction, each requiring three years of study for completion, namely, a general course, a normal course and a collegiate course. The general course shall be designed for those who cannot continue school life after leaving said high school. The normal course shall be designed for those who intend to become teachers, and shall fully prepare any who wish to enter the first year of professional work at the state normal school. The collegiate course shall fully prepare those who wish to enter the freshman class of the state university, or of the state agricultural college or of any other institution of higher learning in this state. Whenever practicable students of the normal course may be employed for a portion of their time in teaching the pupils of the first year in any course; and model schools shall be encouraged."

Tuition shall be free to all pupils residing in the county where the school is located. The law provides for one free high school for all students "who have passed a satisfactory examination in

all the work of the district schools of the county in which such high school is located" The school is supported by a county tax levy.

"BARNES"LAW 1905.

At the close of two decades after the passage of the county law only one-fifth of the counties had availed themselves of its provisions. Time disclosed certain marked defects in the law which will be treated later.

The legislature of 1905 believed a more satisfactory method of extending the benefits of secondary education to all who desired it without payment of tuition was found in the "Barnes" law, so called from the name of its author. It provided that: "In every county in the state in which one or more school districts or cities of less than sixteen thousand inhabitants shall have maintained a high school with courses of instruction admitting those who complete the same to the college of liberal arts and sciences of the University of Kansas, the county commissioners shall levy a tax..for the purpose of creating a general school fund.. Said tax shall be levied and collected in the same manner as other taxes.

Section 8 of this law provides that: "At least two courses of instruction shall be provided, each requiring four years of work, namely: A college preparatory course, which shall fully prepare those who complete it to enter the freshman class of the college of liberal arts and sciences of the University of Kansas, and a general course designed for those who do not intend to continue school work beyond the high school.

ESSENTIALS OF THREE LAWS

The law of 1876 provided that a board of education in cities of the first and second class might establish a high school whenever they thought such action was necessary. As the board would have no power to levy taxes outside their own district the first high schools were maintained by and for the district. Parents of children who lived in contiguous districts were not slow to recognize the inequality of opportunity afforded by this method and began to promote a movement for free high school tuition over a larger area.

There followed the law of 1886 which permitted any county which had adopted the provisions of this act

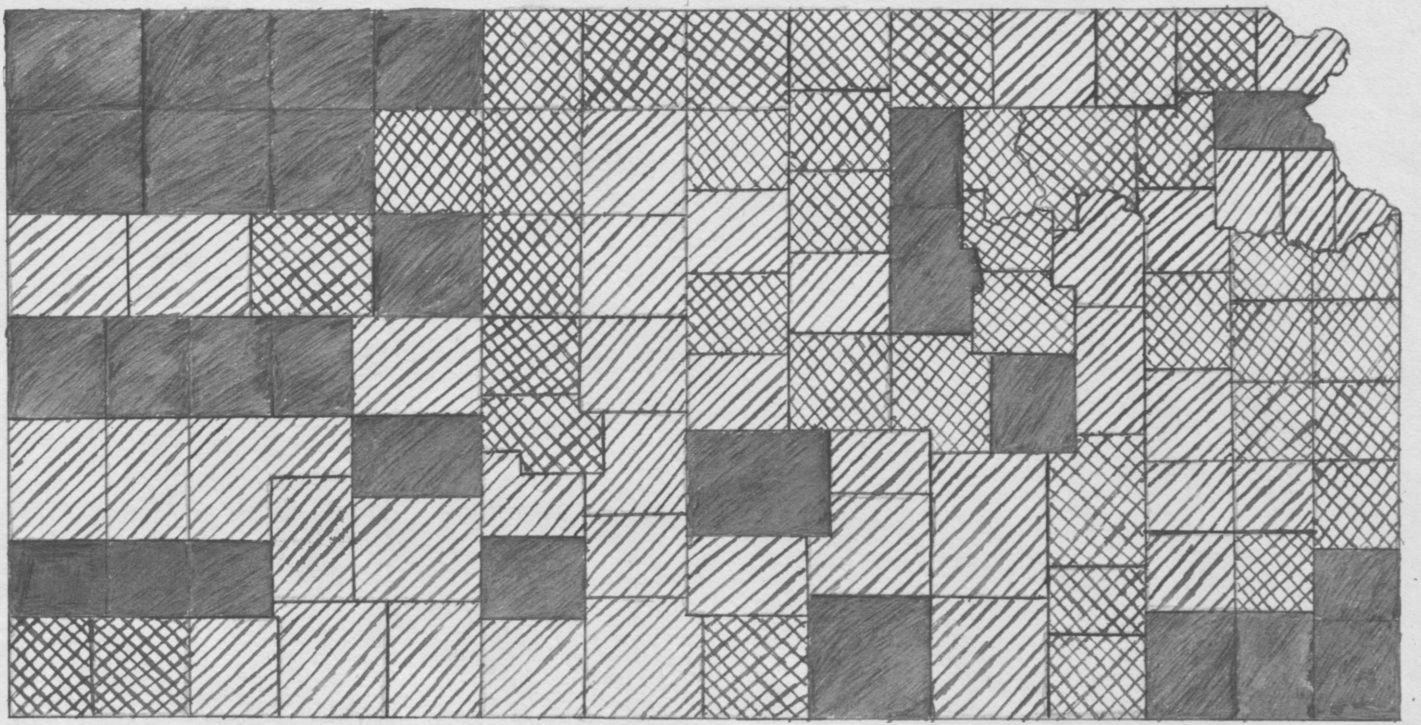
to build and maintain one free high school. It did not restrict single districts in the county from maintaining separate high schools from their own means.

The "Barnes" law has been called the county-aid law. It is essentially different from the county high school law in that it makes no restrictions as to the number of high schools which may be supported by county tax, provided certain standards are maintained by these schools.

The question which this study attempts to answer is, "Which of the three laws is best adapted to conditions in Kansas?" Which provides the greatest amount of training to the largest number of people?

CLASSIFICATION OF COUNTIES BY LAWS

No. 27	No 39	No. 39
County	Barnes	General
Atchison	Allen	Anderson
Chase	Barber	Bourbon
Cherokee	Barton	Brown
Cheyenne	Butler	Chautauqua
Clay	Clark	Cloud
Crawford	Coffey	Douglas
Decatur	Comanche	Elk
Dickinson	Cowley	Ellis
Grant	Doniphan	Ellsworth
Greeley	Edwards	Franklin
Haskell	Finney	Geary
Hodgeman	Ford	Gove
Kiowa	Gray	Graham
Labette	Hamilton	Greenwood
Lane	Harvey	Harper
Montgomery	Jefferson	Jackson
Norton	Kearney	Jewell
Rawlins	Kingman	Johnson
Reno	Leavenworth	Linn
Scott	Lincoln	Marion
Sheridan	Logan	Mc Pherson
Sherman	Lyon	Miami
Stanton	Marshall	Mitchell
Sumner	Meade	Morris
Thomas	Ness	Morton
Trego	Osborn	Nemeha
Wichita	Pratt	Neosho
	Rice	Osage
	Russell	Ottawa
	Saline	Pawnee
	Sedgwich	Phillips
	Seward	Pottawatomie
	Shawnee	Republic
	Stafford	Riley
	Wabaunsee	Rooks
	Wallace	Rush
	Wilson	Smith
	Woodson	Stevens
	Wyandotte	Washington


COUNTY
BARNES
GENERAL

APPLICATION OF TESTS

TEST NUMBER I.

Table 1, which follows represents the counties of the state in the order of their rank according to high school attendance. The school census is also given and the percentage of the school census which attend high school. The number of students who are in high school in each county is represented in the third column of figures.

Table I.

County	Rank	School Census	Number in high school	Percentage in high school
Douglas	1	6989	824	13.22
Butler	2	6353	822	12.93
Logan	3	905	117	12.92
Lane	4	678	85	12.35
Thomas	5	1128	136	12.05
Clark	6	1304	148	11.34
Cowley	7	8465	955	11.28
Harvey	8	5551	623	11.223
Decatur	9	2477	278	11.222
Finney	10	1724	192	11.13
Rice	11	4299	508	11.118
Ness	12	1764	197	11.116
Osban	13	4225	464	10.98
Sumner	14	8883	953	10.89
Barber	15	3068	331	10.788
Jefferson	16	4955	528	10.65
Marshall	17	6792	720	10.60
Osage	18	6243	662	10.58
Stafford	19	3574	375	10.49
Jewell	20	5320	558	10.48

County	Rank	School Census	Number in high school	Percentage in high school
Sedgwick	21	8312	1909	10.42
Harper	22	4308	447	10.37
Elk	23	2846	294	10.33
Scott	24	654	67	10.24
Dickinson	25	7296	742	10.16
Reno	26	11624	1156	9.944
Shawnee	27	17521	1742	9.942
Pratt	28	2267	222	9.79
Edwards	29	3435	336	9.78
Seward	30	1197	126	9.70
Nemeha	31	5842	555	9.51
Lyon	32	7587	721	9.50
Allen	33	7499	700	9.33
Mitchell	34	4425	411	9.28
Wabaunsee	35	3995	366	9.16
Marion	36	7334	660	8.99
Ford	37	3647	324	8.88
Kingman	38	4280	379	8.85
Comanche	39	1369	121	8.83
Franklin	40	6707	591	8.81
Johnson	41	5229	458	8.758
Saline	42	6271	549	8.754
Rooks	43	4575	304	8.74
Ottawa	44	3639	318	8.738
Greenwood	45	4969	434	8.734
Wilson	46	6249	537	8.69
Phillips	47	4376	374	8.54
Barton	48	5277	450	8.52
Mc Pherson	49	6399	543	8.48
Pottawato.	50	5554	470	8.46
Pawnee	51	2365	199	8.414
Bourbon	52	6775	570	8.413
Norton	53	3418	287	8.39
Atchison	54	6881	569	8.26
Greeley	55	303	25	8.25

County	Rank	School Census	Number in High school	Percentage in high school.
Gray	56	1158	95	8.20
Jackson	57	5030	412	8.19
Lincoln	58	3506	285	8.12
Hamilton	59	740	60	8.10
Montgomery	60	13590	1178	8.07
Wallace	61	610	49	8.031
Geary	62	3062	246	8.030
Woodson	63	2883	231	8.00
Labette	64	9008	720	7.99
Meade	65	1687	134	7.92
Brown	66	6423	508	7.90
Coffey	67	4844	381	7.86
Doniphan	68	4671	361	7.72
Linn	69	4445	341	7.67
Riley	70	4915	375	7.62
Wichita	71	489	37	7.56
Leavenworth	72	10489	792	7.554
Chase	73	2543	192	7.55
Sherman	74	1345	101	7.50
Clay	75	4989	374	7.49
Trego	76	1551	115	7.41
Miami	77	5730	435	7.40
Anderson	78	4164	298	7.13
Kearney	79	614	43	7.00
Russell	80	3606	251	6.96
Ellsworth	81	3193	220	6.89
Republic	82	5436	362	6.65
Hodgeman	83	875	57	6.52
Rawlins	84	2049	133	6.49
Chautauqua	85	3655	235	6.42
Wyandotte	86	31510	2015	6.39
Smtih	87	5035	317	6.39
Neosho	88	7152	450	6.29
Washington	89	6374	386	6.05
Rush	90	2797	169	6.14
Cherokee	91	12344	726	5.88
Cloud	92	6095	355	5.82
Sheridan	93	1497	87	5.81
Morris	94	3715	214	5.76
Stanton	95	262	15	5.72

County	Rank	School Census	No. in high school	Percentage in high school.
Gove	96	1442	80	5.54
Grant	97	293	16	5.46
Graham	98	2602	136	5.22
Crawford	99	17012	986	5.80
Kiowa	100	2048	104	5.07
Cheyenne	101	1275	61	4.78
Haskell	102	312	11	3.52
Morton	103	510	17	3.33
Stevens	104	714	21	2.94
Ellis	105	4593	111	2.41
State.....		503011	42331	8.51

SUMMARY

The largest percent of enrollment which is found in Douglas County is thirteen and twenty two hundredths. The lowest is two and forty one hundredths percent in Ellis County. The average enrollment of the state is eight and fifteen hundredths percent of the school census.

Eighteen and one-tenth percent of the total high school enrollment is in cities of the first class; 27% in cities of the second class and 44.1% in cities of the third class. The remaining 9.7% is found in county high schools.

Dividing the 105 counties of the state as above ranked into tertiles of 35 counties each, one finds the following distribution:

Table 1.

Law	First tertile	Second Tertile	Third tertile	Total
County	7	5	15	27
Barnes	20	15	4	39
General	8	15	16	39
	35	35	35	105

This tabulation indicates that where the county is taken as the unit of consideration, the "Barnes" law is producing the best conditions as to enrollment. The general law is second in effectiveness and the county law is the least effective of the three in attracting students.

It is significant to note that of the 9,198 pupils enrolled in the counties which maintain county high schools, only 4,148 or 45% are found in the county high schools themselves while the remaining 55% attend the other high schools of the county which the taxpayers support in addition to the county high school.

It appears that the county high schools are checking rather than furthering the work for which they were organized, viz, to afford "better educational facilities".

GROUPS OF COUNTIES COMPARED.

When all the counties operating under one law are grouped and the percentage of enrollment is compared the distribution is as follows:

Table 1 B

Law	School Census	High School Enrollment	Percentage of Census in H.S.	Rank
County	114,773	9,211	8.01	3
		14,461		
Gemeral	179,885		8.03	2
Barnes	208,353	19,159	9.19	1
	502,971	42,831	8.51	-

While the table ranking the counties separately with reference to enrollment showed that 20 of the 35 counties in the first tertile were "Barnes" law counties the above table which considers the census and high school enrollment of the three groups shows a maximum variation of 1.18% in favor of the "Barnes" Law counties. That degree of variation seems significant since it represents 1.18% of the total school population in high school, and since the school population represents all persons between the ages of 5 and 21 years.

The same table shows the superiority of the counties which maintain their high schools under the provisions of the general law over those which have adopted the county law in the matter of enrollment.

TEST NUMBER II.

The second test is for persistence of attendance. The persistence of attendance is taken to mean the percentage of high school enrollment in the third and fourth years. Peculiar conditions for one year sometimes show abnormal conditions as in the case of the county ranking I in the following table.

Table 2

County	Rank	Percent of enrollment in 3d and 4th years.
Trego	1	53%
Scott	2	47
Ellis	3	45.9
Greeley	4	44.
Wallace	5	40.8
Sheridan	6	40.2
Hamilton	7	40
Sherman	8	39.17
Jewell	9	38.8
Leavenworth	10	38.6
Edwards	11	38.2
Finney	12	38.1
Wichita	13	37.9
Atchison	14	37.8
Kearney	15	37.6
Nemeha	16	37.6
Barber	17	37.4
Rush	18	37.2
Norton	19	37
Smith	20	36.2
Woodson	21	36
Cowley	22	35.9
Logan	23	35.9
Marshall	24	35.8
Wabaunsee	25	35.8
Cloud	26	35.6
Doniphan	27	35.4

County	Rank	Percent of enrollment in 3d and 4th years.
Douglas	28	35.2
Chase	29	35.1
Barton	30	35
Johnson	31	35
Lyon	32	35
Clay	33	34.5
Harvey	34	34.4
Shawnee	35	34.4
Lincoln	36	34.4
Stafford	37	34.4
Montgomery	38	34.1
Osborn	39	34.1
Elk	40	34
Rice	41	34
Comanche	42	33.9
Geary	43	33.9
Mc Pherson	44	33.9
Harper	45	33.6
Pottawottamie	46	33.1
Pawnee	47	33
Neosho	48	32.7
Franklin	49	32.6
Gray	50	32.5
Saline	51	32.5
Seward	52	32.3
Jackson	53	32.3
Dickinson	54	32.1
Sedgwick	55	31.9
Greenwood	56	31.8
Ford	57	31.7
Osage	58	31.6
Thomas	59	31.4
Coffey	60	31.4
Decatur	61	31.2
Sumner	62	31.1
Kingman	63	31.1
Mitchell	64	31
Marion	65	30.9
Ellsworth	66	30.9
Miami	67	30.8
Jefferson	68	30.8
Brown	69	30.6

County	Rank	Percent of enrollment in 3d and 4th years.
Rooks	70	30.5
Washington	71	30.5
Rawlins	72	30.3
Bourbon	73	30.1
Allen	74	29.6
Grant	75	29.4
Crawford	76	29.2
Meade	77	29.1
Phillips	78	28.8
Russell	79	28.6
Linn	80	28.4
Ottawa	81	28.3
Wilson	82	27.1
Mess	83	26.9
Cherokee	84	26.5
Wyandotte	85	26.5
Labette	86	26.5
Chautauqua	87	26.4
Republic	88	26.4
Anderson	89	25.9
Reno	90	24
Stevens	91	23.8
Clark	92	23.6
Morris	93	23.5
Kiowa	94	23.3
Pratt	95	23.2
Cheyenne	96	22.9
Riley	97	22.8
Lane	98	22.2
Butler	99	20.7
Graham	100	20.6
Haskell	101	18.1
Gove	102	17.5
Hodgemen	103	12.5
Morton	104	0
Stanton	105	0

SUMMARY OF TEST NUMBER 11.

Table 2 indicates that the range of variation in persistence of high school attendance is from 53% in

Trego county to 12.5% in Hodgeman and that practically no students in Morton and Stanton counties rise above the first two years of the high school. Grouping the 105 counties into tertiles of 35 counties each the following distribution results with reference to the laws operative in each.

Table 2 A.

Law	No ranked in first tertile	second tertile	third tertile
County	10	5	12
Barnes	17	14	8
General	8	16	15

The fact that almost one half of the counties ranked in the first tertile are "Barnes" law counties indicates that the law which provides county aid to local high schools tends to increase the persistence of attendance.

Table 2 B which follows shows the distribution of attendance in each of the four years of high school in the several counties. Counties are compared by the law operative in each.

Table 2 B

Enrollment

Law	1st yr.	2d yr.	3d yr.	4th yr.	tot.	% inlast two yrs.
County	3965	2341	1564	1200	9070	30.04
Barnes	7767	5039	3329	2763	18898	32.24
General	5623	3764	2423	1953	13703	31.93
Total number in 3d and 4th years				13,232	41,676	31.03

The table indicates that when the three groups of counties are compared the persistence of attendance is greater in the "Barnes" law counties than in the county high school counties by a difference of 2.20% and that the difference between the former and the general law counties is but 1.3%

It is interesting to note the distribution of students in the county high schools through the four years of high school work.

First	Second	Third	Fourth	% in 3-4 yrs.
1,482	972	756	633	36.1

Where county high schools are considered without reference to secondary institutions supported by local taxation in the same county they show elements of superiority that are very marked.

The general law ranks second in persistence of attendance although its results are modified by a much larger percentage of two-year high schools. The distribution of two-year high schools is as follows: "Barnes" counties, 17; county-law counties 25; general-law counties 47. These figures show plainly the influence of the "Barnes" law against this type of school.

TEST NUMBER III.

Test three is a study of the qualification of high school teachers. The unit of comparison is one year of school training above the eight grade. Teachers who have completed the high school course only are awarded four points. Graduates of Normal schools are given six points of credit; graduates of Universities and Colleges receive eight points. Each point represents one year of work above the eighth grade. All teachers not listed as graduates and whose report shows a rather indefinite amount of school work are given two points.

Counties are therefore compared with respect to the qualification of their high school teachers by stressing the number of high school graduates in each county by four, University graduates by eight, Normal school graduates by six and all other by two.

The resultant products are then added and the sum is divided by the total number of high school teachers in the county.

The counties are then ranked in the order of the size of the resultant quotients.

Table 3.

In the following table the first column represents the number of years of preparation of the teachers of that county, the second shows the number of teachers, the third the average number of years of preparation per teacher. The counties are ranked in the order of their superiority in the latter respect.

Rank	County	Years of preparation	Number of teachers	Ave.
1	Chase	136	17	8
2	Geary	88	11	8
3	Lane	24	3	8
4	Trego	32	4	8
5	Stanton	16	2	8
6	Grant	8	1	8
7	Comanche	70	9	7.77
8	Coffey	130	17	7.64
9	Clay	122	16	7.62
10	Hodgeman	38	5	7.6
11	Logan	68	9	7.55
12	Harvey	226	30	7.53
13	Ford	112	15	7.46
14	Pratt	112	15	7.46
15	Leavenworth	276	37	7.45
16	Sedgwick	574	77	7.45
17	Finney	82	11	7.45
18	Clark	74	10	7.4
19	Dickinson	300	41	7.31
20	Riley	96	13	7.30
21	Norton	80	11	7.27
22	Phillips	116	16	7.25
23	Greenwood	114	20	7.2
24	Sherman	36	5	7.2
25	Douglas	230	32	7.18
26	Harper	186	26	7.15
27	Mc Pherson	186	26	7.15
28	Hamilton	50	7	7.14
29	Cowley.	264	37	7.13
30	Lyon	228	32	7.125
31	Jackson	128	18	7.11

Rank	County	Years of preparation	Number of teachers	Average
31	Jackson	128	18	7.11
32	Linn	120	17	7.05
33	Ellsworth	84	12	7
34	Kearney	28	4	7
35	Scott	28	4	7
36	Greeley	14	2	7
37	Allen	216	31	6.961
38	Stafford	174	25	6.96
39	Brown	208	30	6.93
40	Osage	194	28	6.92
41	Shawnee	346	50	6.88
42	Ness	62	9	6.82
43	Ottawa	116	17	6.81
44	Wyandotte	552	81	6.78
45	Pawnee	190	28	6.78
46	Rice	210	31	6.77
47	Marion	204	31	6.77
48	Chautauqua	88	13	6.76
49	Jefferson	196	29	6.75
50	Thomas	54	8	6.75
51	Barber	114	17	6.7
52	Anderson	140	21	6.66
53	Wallace	20	3	6.66
54	Wichita	20	3	6.66
55	Montgomery	292	44	6.63
56	Butler	272	41	6.63
57	Saline	212	32	6.62
58	Decatur	86	13	6.61
59	Ellis	66	10	6.6
60	Johnson	138	21	6.57
61	Edwards	92	14	6.57
62	Jewell	164	25	6.56
63	Crawford	249	38	6.55
64	Wilson	190	29	6.55
65	Nemeha	170	26	6.53
66	Bourbon	176	27	6.51
67	Republic	104	16	6.5
68	Rawlins	52	8	6.5
69	Reno	292	45	6.48
70	Atchison	194	30	6.46
71	Barton	148	23	6.43
72	Osborne	128	20	6.4
73	Kingman	128	20	6.4

Rank	County	Years of preparation	Number of teachers	Average
74	Washington	140	22	6.36
75	Kiowa	38	6	6.30
76	Cheyenne	38	6	6.30
77	Rooks	94	15	6.26
78	Neosho	144	23	6.26
79	Cloud	100	16	6.25
80	Mitchell	112	18	6.22
81	Pottawatomie	114	23	6.21
82	Lincoln	68	11	6.18
83	Woodson	92	15	6.13
84	Sumner	372	61	6.09
85	Morris	78	13	6.00
86	Russell	72	12	6.00
87	Seward	36	6	6.00
88	Graham	34	4	6.00
89	Haskell	18	3	6.00
90	Stevens	12	2	6.00
91	Labette	200	34	5.88
92	Cherokee	188	29	5.79
93	Franklin	178	29	5.79
94	Wabaunsee	126	22	5.72
95	Marshall	148	26	5.69
96	Gray	28	5	5.60
97	Sheridan	22	4	5.50
98	Miami	118	22	5.35
99	Doniphan	118	22	5.36
100	Elk	74	15	4.93
101	Smith	68	14	4.85
102	Meade	56	12	4.66
103	Gove	32	7	4.57
104	Rush	36	8	4.50
105	Morton	6	2	3.00

SUMMARY OF TEST III.

When the various counties are grouped with reference to the high school law operative in each the fore-

going table shows that the county high school counties support 440 teachers whose preparation averages 6.65 years of school work above the eight grade per teacher. In the "Barnes" law counties there are 996 teachers with an average preparation of 6.12 years. In general law counties in which no provision is made for free tuition for students living out side the district there are 720 teachers who have had 6.55 years each in high school or college.

The high average of the county high school counties is raiaed by the higher standards of scholarship demanded of teachers in the county high schools themselves and not by the standards of those other high schools in the same counties supported by district taxation.

It is interesting to note that the "Barnes" law counties are randed in third place by this test. It is not an easy matter to name reasons to account for this fact. No doubt the increased attendance in these counties has thrown an unusual burden of taxation upon the taxpayers and a less amount of money is set aside for salaries per teacher on this account. The indications are that the "Barnes" counties

enroll more students, spend more money per capita enrollment but have poorer teachers than either of the other two groups. It appears that the "Barnes" law lays too much emphasis on the maintenance of a so called four year high school. This is due to the fact that the school is not permitted to share in the funds of the county until it offers a fourth year of work. This regulation has a tendency, as the above table indicates to sacrifice the quality of the work to the quantity.

The county high school counties which have the smallest number of high schools per county have the highest standard of preparation of teachers.

At best, the preparation which the average teacher makes is not sufficient to meet the increasing demands of the high school curriculum. It appears that the average teacher has finished two years of school work at a college or Normal school, usually the latter. The median average period of preparation is 6 2/3 years above the elementary school.

Table Number 4.

County	Rank	Average Salary	County	Rank	Average Salary
Wyandotte	1	117.754	Lincoln	44	85.454
Pratt	2	105.60	Logan	45	85.444
Sedgwick	3	102.046	Osborne	46	85.346
Shawnee	4	101.33	Wilson	47	85.265
Reno	5	98.344	Ottawa	48	85.
Wallace	6	97.50	Trego	49	84.995
Ellsworth	7	93.20	Doublas	50	84.951
Gray	8	93.20	Finney	51	84.727
Doniphan	9	92.50	Crawford	52	84.708
Pottawat.	10	92.265	Sumner	53	84.656
Barber	11	92.	Labette	54	84.569
Ford	12	92.	Nemeha	55	84.16
Ellis	13	92.	Cherokee	56	84.114
Kearney	14	92.	Clay	57	83.98
Marion	15	91.935	Neosho	58	83.587
Marshall	16	91.304	Kingman	59	83.469
Comanche	17	90.40	Barton	60	83.369
Lyon	18	90.23	Wichita	61	83.333
Chase	19	90.063	Pawnee	62	83.33
Leavenworth	20	89.999	Dickinson	63	83.140
Ness	21	89.818	Johnson	64	83.083
Thomas	22	89.375	Jackson	65	82.844
Graham	23	89.	Rooks	66	82.666
Elk	24	88.933	Norton	67	82.434
Franklin	25	88.884	Decatur	68	82.368
Coffey	26	88.619	Chautau.	69	82.25
Russell	27	88.555	Anderson	70	82.119
Meade	28	881554	Stanton	71	81.94
Jefferson	29	88.545	Brown	72	81.887
Wabaunsee	30	88034	Seward	73	81.388
Clark	31	87.897	Cheyenne	74	81.250
Geary	32	87.857	Miami	75	80.625
Butler	33	87.857	Linn	76	80.123
Atchison	34	87.851	Phillips	77	80.111
Rush	35	87.59	Greeley	78	80.
Washington	36	87.43	Sheridan	79	80.
Cowley	37	87.09	Stevens	80	80.
Montgomery	38	86.425	Harper	81	79.406
Edwards	39	86.102	Rawlins	82	79.375
Harvey	40	86.088	Sherman	83	79.
Bourbon	41	85.956	Rice	84	78.51
Mitchell	42	85.947	Mc Pherson	85	78.183
Smith	43	85.781	Hodgeman	86	78.
			Allen	87	77.125
			Hamilton	88	77.083

TEST NUMBER IV.

Test four is applied to the salaries of teachers. It is an accepted theory that in the long run the quality of instruction will sustain a fixed ratio to the salary of the instructors. The teacher makes the school. The good teacher will have a good school and the poor one a poor school. It is the well trained and efficient teacher that is the well paid teacher in spite of the many exceptions. The statistics from which the following table is made are taken from the report of the State Superintendent of Public Instruction for the year 1914. The report shows the average salary paid to male teachers and to female teachers and the number of each. To ascertain the aggregate salary of male teachers in a county their number is multiplied by the average salary paid male teachers. By a similar process the salary of female teachers is found. Dividing the total amount paid for teachers salaries by the total number of teachers gives the desired quitient. This represents the average salary paid to high school teachers in each county.

County	Rank	Average Salary
Greenwood	89	77.
Riley	90	76.846
Morris	91	76.145
Osage	92	75.075
Kiowa	93	74.916
Cloud	94	73.828
Scott	95	73.75
Republic	96	73.461
Gove	97	72.812
Lane	98	71.666
Saline	99	71.314
Jewell	100	70.96
Morton	101	70.
Woodson	102	69.266
Stafford	103	68.96
Grant	104	65
Haskell	105	60

SUMMARY OF TEST IV.

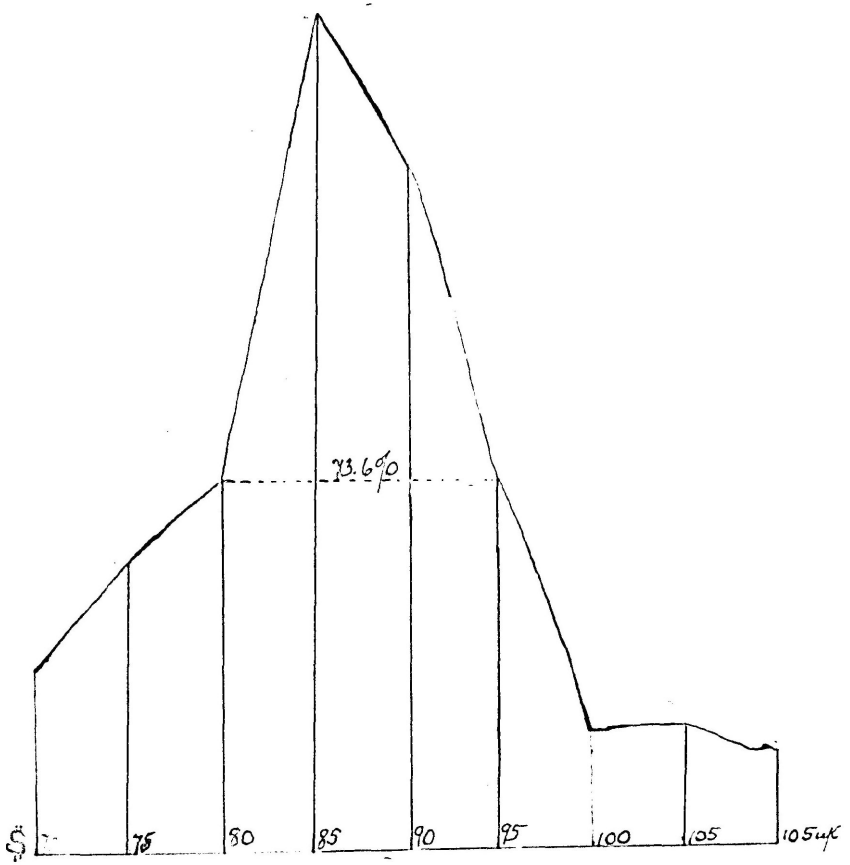
The preceding table which shows the average salary paid to high school teachers in the several counties of Kansas is compelling evidence of the fact that "Barnes" counties pay better salaries to their teachers. Of the first 58 counties in point of teachers' salaries 53% are "Barnes" counties, 18% county-high school counties and 29% operate under the general law.

Four counties pay their high school teachers more than $100, fifteen pay more than $90, sixty-one pay $80 or more, twenty pay above seventy and the remaining five all pay above $65 except one which pays $60. The highest salaries are paid in Wyandotte county where the average salary is $117.75, the median is found in Sumner county which pays $84.65 per teacher per month and the very low salaries are found only in the extreme western sections which support high schools with considerable difficulty.

One is led to conclude from the foregoing facts that there is a marked tendency to reduce the salaries of high school teachers to a level. It is little wonder

that teachers are an itinerant class when the range of possible salary is from $65 to $117 per month for nine months of the year. Little wonder they are in haste to exhaust the meagre possibilities which can be realized only through change of position. Sumner county which is typical in respect to salaries pays her 65 high school teachers $5418 per month. Each teacher receives $761.85 per year or$63.50 per calendar month. And when one considers that in 73.63% of the counties of Kansas the range of variation in salaries if from $80 to$95 one must conclude that the average teacher who pursues her calling must discontinue her labors drawing about the same salary as that with which she began.

Plate I.



The above frequency surface shows the distribution of high school salaries for the entire state. The average salary of high school teachers in a county is the basis.

Vertical scale: one inch to eight counties.

TEST NUMBER V.

The Salary of Superintendents and Principals.

It was thought wise to consider the salaries paid to supervising officers apart from the instructors themselves as the division of their functions is becoming more and more marked. Recent investigations have shown that the degree of efficiency which a school reaches will be determined quite largely by the efficiency of the superintendent or in high schools of the principal.

In this study the average salary of the superintendents, the principals of county high schools and the principals of city high schools in cities of the first and second class were added and an average taken. The counties were then ranked in order of the average salary paid.

County	Ave. Salary	No. of high schools.	Rank
Wyandotte	1864	7	1
Geary	1575	1	2
Douglas	1540	4	3
Ellis	1497	2	4
Leavenworth	1433	6	5
Finney	1425	1	6
Montgomery	1413	7	7
Atchison	1381	4	8
Cowley	1381	6	9
Harvey	1381	5	10

County	Ave. Salary	No. of high schools	Rank
Bourbon	1341	3	11
Miami	1325	2	12
Ford	1311	4	13
Crawford	1310	9	14
Sedgwick	1304	10	15
Seward	1300	1	16
Barton	1279	5	17
Mitchell	1256	3	18
Chase	1256	2	19
Osborne	1234	5	20
Franklin	1228	4	21
Shawnee	1195	10	22
Reno	1194	11	23
Riley	1192	4	24
Saline	1177	6	25
Edwards	1175	3	26
Neosho	1174	5	27
Marshall	1158	11	28
Meade	1157	3	29
Anderson	1127	4	30
Hodgeman	1125	1	31
Wallace	1125	1	32
Trego	1120	2	33
Allen	1115	10	34
Lyon	1109	7	35
Wilson	1111	9	36
Labette	1109	7	37
Wabaunsee	1101	6	38
Dickinson	1090	10	39
Clark	1083	3	40
Greenwood	1080	4	41
Osage	1069	7	42
Mc Pherson	1066	7	43
Woodson	1064	3	44
Cloud	1061	6	45
Jefferson	1052	9	46
Butler	1048	12	47
Stafford	1034	5	48
Doniphan	1033	8	49
Brown	1033	7	50
Kearney	1028	2	51
Pawnee	1024	3	52
Ellsworth	1014	5	53
Jewell	1006	7	54
Linn	1002	6	55

County	Ave. Salary	No. of high schools	Rank
Greeley	1000	1	56
Comanche	997	3	57
Rice	996	9	58
Harper	995	6	59
Coffey	994	6	60
Cherokee	993	7	61
Barber	992	7	62
Norton	991	4	63
Johnson	982	6	64
Marion	980	9	65
Ottawa	977	4	66
Sherman	970	3	67
Sumner	965	15	68
Sheridan	960	2	69
Pratt	955	5	70
Morris	957	4	71
Kiowa	950	3	72
Clay	949	6	73
Pottawat.	949	10	74
Logan	949	4	75
Lincoln	948	5	76
Washington	945	9	77
Elk	944	5	78
Russell	942	7	79
Republic	934	5	80
Cheyenne	933	2	81
Rooks	930	5	82
Nemeha	927	8	83
Hamilton	923	2	84
Kingman	901	8	85
Stevens	900	1	86
Jackson	900	5	87
Grant	900	1	88
Scott	900	1	89
Wichita	900	1	90
Rawlins	898	3	91
Rush	869	4	92
Chautauqua	867	5	93
Ness	864	5	94
Phillips	863	6	95
Smith	847	8	96
Lane	840	2	97
Graham	817	3	98
Gove	810	3	99
Morton	800	1	100
Decatur	798	7	101
Thomas	796	5	102
Stanton	765	1	103
Haskell	730	2	104
Gray	679	2	105

Table V A.

Comparing the Three Groups of Counties.

	1st. ter.	2d ter.	3d ter.	Rank
Barnes	18	14	7	1
County	7	8	12	3
General	10	13	16	2
Total	35	35	35	-

SUMMARY OF TEST V.

If one takes the statistics in table five as a basis and collects the several counties of the state into groups according to the three laws that have been under consideration one finds a somewhat typical variation. The lowest median salary is found in the county high school counties, the next higher in the general law counties and the highest in the "Barnes" law counties. The median salary of a supervising officer in counties which maintains a county high school is $964; in counties which no provision for free tuition outside the district $995; in "Barnes" law counties $1101. On the other hand although the county high school counties pay the smallest salaries when all the supervisory offices are taken into consideration, it is interesting

to note that the principals of county high schools are the best paid executive officers in the state. The median salary for this office is $1380. This is further evidence of the fact that these officers are relatively overpaid in comparison with the principals of high schools in the same county which receive no county aid. Yet the county as a whole is supporting these schools in the interests of the whole county. As the situation now exists, a few are getting a superior quality of supervision, a large number are getting a very inferior quality of supervision. Those who are getting the poor instruction are paying for it plus what it costs to maintain a good central school. When one considers that the supervisors of the county high schools are the best paid officers in the state and that these same counties fall to last place when the counties as a whole are considered, one is safe in concluding that the law is working an injustice and should be changed.

TEST NUMBER VI..

THE LIBRARY

TABLE 6.

Rank of counties according to the average number of volumes per pupil of school age.

County	Rank	Av. vols per pupil.
Stevens	1	24.28
Kearney	2	21.88
Grant	3	17.06
Doniphan	4	13.44
Mitchell	5	11.66
Logan	6	11.54
Allen	7	11.12
Jefferson	8	10.92
Hamilton	9	10.10
Trego	10	10
Greeley	11	8.72
Wyandotte	12	8.71
Riley	13	8.59
Scott	14	8.10
Sheridan	15	8.08
Edwards	16	8.05
Anderson	17	7.88
Atchison	18	7.79
Clark	19	7.46
Dickinson	20	7.23
Neosho	21	7.14
Linn	22	7.13
Ellis	23	7.09
Jewell	24	7.08
Chase	25	7.07
Chautauqua	26	6.99
Osage	27	6.92
Woodson	28	6.88
Elk	29	6.82
Montgomery	30	6.74

County	Rank	Av. vols per pupil
Pottawatomie	31	6.72
Norton	32	6.67
Sumner	33	6.63
Marshall	34	6.54
Gove	35	6.53
Geary	36	6.50
Gray	37	6.50
Wilson	38	6.20
Wallace	39	6.02
Labette	40	5.99
Comanche	41	5.95
Nemeha	42	5.91
Brown	43	5.81
Ottawa	44	5.78
Barber	45	5.57
Leavenworth	46	5.54
Lincoln	47	5.54
Wabaunsee	48	5.37
Ellsworth	49	5.27
Wichita	50	5.13
Mc Pherson	51	5.09
Stafford	52	4.94
Pawnee	53	4.85
Lyon	54	4.66
Rice	55	4.59
Ford	56	4.56
Meade	57	4.40
Cloud	58	4.22
Osborne	59	4.20
Washington	60	4.18
Barton	61	4.14
Pratt	62	4.04
Kingman	63	4.01
Marion	64	3.97
Cheyenne	65	3.88
Greenwood	66	3.88
Cowley	67	3.87
Cherokee	68	3.72
Saline	69	3.70
Smith	70	3.60
Rawlins	71	3.48
Reno	72	3.47
Ness	73	3.42
Crawford	74	3.40
Jackson	75	3.28

County	Rank	Av. Vols per pupil.
Clay	76	3.20
Johnson	77	3.04
Graham	78	2.98
Harvey	79	2.94
Rush	80	2.93
Rooks	81	2.91
Sedgwick	82	2.80
Douglas	83	2.77
Lane	84	2.67
Republic	85	2.55
Harper	86	2.55
Seward	87	2.50
Thomas	88	2.49
Franklin	89	2.37
Coffee	90	2.28
Bourbon	91	2.26
Phillips	92	2.03
Morris	93	1.96
Hodgeman	94	1.91
Sherman	95	1.88
Butler	96	1.88
Finney	97	1.87
Kiowa	98	1.78
Decatur	99	1.33
Russell	100	.84
Miami	101	.72
Shawnee	102	----
Haskell	103	----
Morton	104	----
Stanton	105	----

Table 6A.

Number and percent of counties in each group.

First Tertile

Barnes	11	31%
County	11	31%
General	13	37%

Second Tertile

Barnes	19	54%
County	4	11%
General	12	34%

Third Tertile

Barnes	9	25%
County	12	34%
General	14	40%

Table 6B.

Total Volumes

Barnes	88,125	42% of the total
County	51,294	24% of the total
General	69,850	33% of the total

SUMMARY OF TEST NUMBER VI..

The importane of the library upon which relevancy of this test is predicated needs no comment. This is the greatest reading age in history. The domain of knowledge widens with each succeeding year and school libraries have not kept apace with tne times. In the attempts to economize, the library which has been the first department to suffer should have been the last. One accredited high school has not the semblance of a library in its building. A Century Book of Facts and a much used dictionary were the only available volumes.

The foregoing tables indicate the strength of the "Barnes" law in aiding schools to increase the number of supplementary books.

TEST NUMBER VII.

Breadth of Curriculum.

The addition of new subjects and new material to the curriculum has been one of the significant changes through which the school has passed during the past quarter of a century. The curriculum of the high school has changed from one of a few required subjects to one of a larger number. New subjects are constantly arising and are being incorporated into the curriculum to meet another of the increasing demands of a modern complex society. The extent to which the curriculum has been broadened, what subjects are now to be found in the curriculum of the Kansas high school, what and how many of these may be classed as new as distinguished from the eleven and one-half required subjects which have been the staple requirement for entrance to the University of Kansas and finally how the several counties of the state compare in these respects is the purpose of this test.

The basis of comparison is the excess of units over the eleven and one-half recommended by the University of Kansas which are offered by the counties of the state in their high schools. The number repre-

senting the school population is then divided by the number of the excess units and the quotient shows the number of such units per student of school age which are offered. But since it must be conceded that the number of schools in a county increases the opportunity of a student to select these units the above mentioned quotient is again divided by the number of high schools in the county. The quotient so derived is what we have termed the ratio of opportunity.

The greater the divisor or number of schools in a county the smaller the quotient and the greater the opportunity. Hence counties which in this division show the smaller quotient are ranked first.

For example, Allen county offers in all of its schools a total of 160.5⅝ units. Eight (the number of towns) X 11½ (number of units which University calls for) make 92 regular units. This number subtracted from 160.5 leaves 68.5 excess units. Dividing 7499, (school pupulation) by 68.5 gives 109.4. This number divided by 8 the number of towns gives 13 plus or the ration of opportunity.

Table VII

County	Rank	Opportunity	County	Rank	Oppor.
Butler	1	7.49	Crawford	43	30.23
Osborne	2	11.47	Kingman	44	30.55
Osage	3	11.6	Leavenwor	45	30.7
Jefferson	4	12.5	Ottawa	46	30.75
Doniphan	5	13.27	Russell	47	30.8
Allen	6	13.9	Pottawato.	48	31.3
Marshall	7	14.5	Miami	49	31.35
Stafford	8	14.9	Coffey	50	32.3
Marion	9	15.2	Johnson	51	33.2
Wilson	10	15.3	Lyon	52	35.1
Harvey	11	16.2	Saline	53	35.8
Nemeha	12	16.22	Lincoln	54	37.3
Dickinson	13	16.41	Neosho	55	38.66
Franklin	14	16.9	Ellsworth	56	38.92
Barton	15	16.94	Norton	57	39.3
Sumner	16	17.08	Meade	58	40.1
Wabaunsee	17	17.18	Phillips	59	42.9
Rice	18	17.1	Ford	60	43.4
Clark	19	17.38	Republic	61	43.48
Logan	20	17.4	Pratt	62	45.8
Labette	21	18.09	Bourbon	63	50.2
Mc Pherson	22	18.1	Pawnee	64	54.3
Greenwood	23	19.21	Kearney	65	56.8
Jewell	24	19.55	Wyandotte	66	57.7
Anderson	25	19.59	Riley	67	58.9
Ness	26	20.1	Elk	68	59.9
Wallace	27	20.3	Shawnee	69	60.9
Brown	28	20.41	Cherokee	70	61.1
Barber	29	20.87	Cloud	71	65.9
Sedgwick	30	20.9	Rush	72	66.9
Greeley	31	22.4	Hamilton	73	67.2
Harper	32	22.67	Finney	74	67.6
Linn	33	22.7	Washington	75	77.2
Mitchell	34	23.9	Jackson	76	79.8
Woodson	35	25.3	Decatur	77	83.9
Edwards	36	25.46	Douglas	78	87.9
Reno	37	25.8	Thomas	79	90.2
Cowley	38	26.87	Chautau.	80	93.7
Atchison	39	27.52	Chase	81	94.2
Rooks	40	28.1	Rawlins	82	94.3
Montgomery	41	28.3	Grant	83	97.6
Comanche	42	29.1	Morris	84	100.3

Table 7 (con.)

County	Rank	Opportunity
Seward	85	100.5
Gray	86	100.7
Sherman	87	100.6
Smith	88	117.1
Ellis	89	118.7
Clay	90	127.5
Geary	91	131.0
Gove	92	145.3
Scott	93	146.2
Kiowa	94	158.9
Hodgeman	95	187.0
Sheridan	96	212.5
Cheyenne	97	236.5
Graham	98	285.0
Stevens	99	339.0
Lane	100	---.-
Haskell	101	---.-
Martin	102	---.-
Stanton	103	---.-
Trego	104	---.-
Wichita	105	---.-

SUMMARY OF TEST VII.

There are forty five subjects offered in the high schools of the state as a whole. The subjects are: English, physics, cooking, commercial, agriculture, manual training, physical geography, physiology, German, French, history, civics, chemistry, botany, zoology, education, sewing, music, Latin, algebra, geometry, drawing, normal, economics, elementary science, printing, psychology, public speaking, word analysis, sociology, piano, harmony, mechanical

drawing, Bible, citizenship, debate, orchestra, glee club, college algebra, trigonometry, political science physical training, forging and Greek.

This is the list of subjects as they appear on the blanks sent out by the state institution for the purpose of gathering such information.

The number of units of subject matter offered in the counties of the state varies from eleven and one-half including English, algebra, history, geometry, Latin, to two hundred units including almost all the possible combinations from the above list.

Table VII.

Law	Number	Percent	Percent of total
		First tertile	
Barnes	19	54	48
General	12	34	38
County	4	11	14
		Second tertile	
Barnes	16	45	41
General	12	34	31
County	7	20	27
		Third tertile	
Barnes	4	11	10
General	15	43	38
County	16	45	62

We conclude from the above table that the "Barnes" type of high school offers the greatest opportunity as regards breadth of curriculum and that the County

law stands second in this respect.

Of the thirty nine counties under the "Barnes" law 49% are in the first tertile, 41% are in the second, and 10% in the third.

Of the thirty nine counties under the General law 62% are found in the first two tertiles, and 38% in the third.

Of the County high school counties only 15.4% or a little less than one-sixth appears in the first class. 27% in the second and 61 % or 3/5 in the third.

The superiority of the "Barnes" law in this respect is evident.

Table 8

Table 8 consists of the findings of each of the seven tests which have been applied. The score which each county is given is the sum of its ranks. The county which has the lowest score receives the highest rank. For convenience the seven tests are enumerated as follows:

1. Percentage of school population in high school.
2. Persistence of high school attendance.
3. Preparation of teachers.
4. Salaries of teachers.
5. Salaries of supervisors.
6. Library facilities.
7. Breadth of curriculum.

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Allen	33	74	37	87	34	7	6	278	26
Anderson	78	87	52	70	30	28	25	370	57
Atchison	54	14	70	34	8	3	39	222	8
Barber	15	17	51	11	62	64	29	249	21
Barton	48	30	71	60	17	37	15	278	27
Bourbon	52	73	66	41	11	65	63	371	59
Brown	66	69	39	72	50	59	28	383	63
Butler	2	99	56	33	47	61	1	299	36
Chase	73	29	1	19	19	9	81	231	12
Chautauqua	85	87	48	69	93	52	80	514	92
Cherokee	91	84	92	56	61	30	70	484	87
Cheyenne	101	96	76	74	81	94	97	619	101
Clark	6	92	18	31	40	41	19	247	20
Clay	75	33	9	57	73	75	90	412	70
Cloud	92	26	79	94	45	67	71	474	83
Coffey	67	60	8	26	60	91	50	362	52
Comanche	39	42	7	17	57	69	42	273	24
Cowley	7	22	29	37	9	14	38	156	1
Crawford	99	76	63	52	14	44	43	391	67
Decatur	9	61	58	68	101	100	77	477	86
Dickinson	25	54	19	63	39	21	13	234	15

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Doniphan	68	27	99	9	49	16	5	273	23
Douglas	1	28	25	50	33	11	78	226	10
Edwards	28	11	61	39	26	17	36	218	6
Elk	23	40	100	24	78	35	68	368	55
Ellis	105	3	59	13	4	36	89	309	39
Ellsworth	81	66	33	7	53	78	56	374	61
Finney	10	12	17	51	6	43	74	213	5
Ford	37	57	13	12	13	40	60	232	13
Franklin	40	49	93	25	21	87	14	329	44
Geary	62	43	2	32	2	4	91	236	16
Gove	96	102	103	97	99	90	92	679	103
Graham	98	100	88	23	98	89	98	594	99
Grant	97	75	6	104	88	62	83	515	93
Gray	56	50	96	8	105	73	86	476	85
Greeley	55	4	36	78	56	72	31	332	46
Greenwood	45	56	23	89	41	68	23	345	48
Hamilton	59	77	28	88	84	58	73	467	81
Harper	22	45	26	81	59	83	32	348	49
Harvey	8	34	12	40	10	42	11	157	2
Haskell	102	101	89	105	104	103	101	705	104
Hodgeman	83	103	10	86	31	97	95	505	91
Jackson	57	53	31	65	87	81	76	450	79
Jefferson	16	67	49	29	46	12	4	223	9
Jewell	20	9	62	100	54	26	24	295	35
Johnson	41	31	60	64	64	76	51	387	65
Kearney	79	15	34	14	51	27	65	285	31
Kingman	38	63	73	59	85	79	44	441	77
Kiowa	100	94	75	93	72	102	94	630	102
Labette	64	86	91	54	37	15	21	368	56
Lane	4	98	3	98	97	96	100	496	88
Leavn'wth	72	10	15	20	5	6	45	173	4
Lincoln	58	36	82	44	76	74	54	424	73
Linn	69	80	32	76	55	48	33	393	68
Logan	3	23	11	45	75	50	20	227	11
Lyon	32	32	30	18	35	34	52	233	14

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Marion	36	65	47	15	65	71	9	308	37
Marshall	17	24	95	16	28	32	7	219	7
Mc Pherson	49	44	27	85	43	49	22	319	41
Meade	65	77	102	28	29	77	58	436	75
Miami	77	67	98	75	12	70	49	448	78
Mitchell	34	64	80	42	18	1	34	273	25
Montgomery	60	38	55	38	7	2	41	241	17
Morris	94	93	85	91	71	99	84	617	100
Morton	103	104	105	101	100	104	102	719	105
Nemeha	31	16	65	55	83	51	12	313	40
Neosho	88	48	78	58	27	10	55	364	53
Ness	12	83	42	21	94	95	26	373	60
Norton	53	19	21	67	63	29	57	309	38
Osage	18	58	40	92	42	25	3	278	28
Osborne	13	39	78	46	20	53	2	245	19
Ottawa	44	81	43	48	66	57	46	385	64
Pawnee	51	47	45	62	52	55	64	376	62
Phillips	47	78	22	77	95	93	59	471	82
Pottawatomie	50	46	81	10	74	56	48	365	54
Pratt	29	95	14	2	70	63	62	335	47
Rawlins	84	72	68	82	91	85	82	564	96
Reno	26	90	69	5	23	13	37	263	22
Republic	82	88	67	96	80	84	61	558	95
Rice	11	41	46	84	58	66	18	324	42
Riley	70	97	20	90	24	20	67	488	66
Rooks	43	70	77	66	82	86	40	464	80
Rush	90	18	104	35	92	8	72	419	72
Russell	80	79	86	27	79	31	47	429	74
Saline	42	51	57	99	25	47	53	354	50
Scott	24	2	35	95	89	19	93	357	51
Sedgwick	21	55	16	3	15	22	30	162	3
Seward	30	52	87	73	16	54	85	397	69
Shawnee	27	35	41	4	22	92	69	299	33
Sheridan	93	16	97	79	69	46	96	496	89
Sherman	74	18	24	83	67	98	87	441	76

County	Test and Rank							Score	Rank
	1	2	3	4	5	6	7		
Smith	87	20	101	43	96	88	88	523	94
Stafford	19	37	38	103	48	38	8	291	34
Stanton	95	105	5	71	103	105	103	587	98
Stevens	104	91	90	80	86	24	99	574	92
Sumner	14	62	84	53	68	33	16	330	45
Thomas	5	59	50	22	102	101	79	418	71
Thrego	76	1	4	49	33	18	104	285	30
Wabaunsee	35	25	94	30	38	45	17	284	29
Wallace	61	5	53	6	32	60	27	244	18
Washington	89	71	74	36	77	82	75	504	90
Wichita	71	13	54	61	90	80	105	474	84
Wilson	46	82	64	47	36	39	10	324	43
Woodson	63	21	83	102	44	23	35	371	58
Wyandotte	86	85	44	1	1	5	66	288	32

COUNTIES RANKED IN NUMERICAL ORDER
Table 9

The following table ranks the counties of Kansas in the order of their superiority with reference to the seven tests. The law in force in each county is indicated after it. The score and rank of each county is given.

County	Law	Score	Rank
Cowley	Barnes	156	1
Harvey	Barnes	157	2
Sedgwick	Barnes	162	3
Leavenworth	Barnes	173	4
Finney	Barnes	213	5
Edwards	Barnes	218	6
Marshall	Barnes	219	7
Atchison	County	222	8
Jefferson	Barnes	223	9
Douglas	General	226	10
Logan	Barnes	227	11
Chase	County	231	12
Ford	Barnes	232	13
Lyon	Barnes	233	14
Dickinson	County	234	15
Geary	General	236	16
Montgomery	County	241	17
Wallace	Barnes	244	18
Osborne	Barnes	245	19
Clark	Barnes	247	20
Barber	Barnes	249	21
Reno	County	263	22
Doniphan	Barnes	273½	23
Comanche	Barnes	273½	24
Mitchell	General	273½	25
Allen	Barnes	278½	26
Barton	Barnes	278½	27
Osage	General	278½	28
Wabaunsee	Barnes	284	29
Trego	County	285½	30
Kearny	Barnes	285½	31
Wyandotte	Barnes	288	32
Shawnee	Barnes	290	33
Stafford	Barnes	291	34
Jewell	General	295	35

County	Law	Score	Rank
Butler	Barnes	299	36
Marion	General	308	37
Norton	County	309.1	38
Ellis	General	309.1	39
Nemeha	General	313	40
Mc Pherson	General	319	41
Rice	Barnes	324.1	42
Wilson	Barnes	324.1	43
Franklin	General	329	44
Sumner	County	330	45
Greeley	County	332	46
Pratt	Barnes	335	47
Greenwood	General	345	48
Harper	General	348	49
Saline	Barnes	354	50
Scott	County	357	51
Coffey	Barnes	362	52
Neosho	General	364	53
Pottawatomie	General	365	54
Elk	General	368.1	55
Labette	County	368.1	56
Anderson	General	370	57
Woodson	Barnes	371.1	58
Bourbon	General	371.1	59
Ness	Barnes	373	60
Ellsworth	General	374	61
Pawnee	General	376	62
Brown	General	383	63
Ottawa	General	385	64
Johnson	General	387	65
Riley	General	388	66
Crawford	County	391	67
Linn	General	393	68
Seward	Barnes	397	69
Clay	County	412	70
Thomas	County	418	71
Rush	General	419	72
Lincoln	Barnes	424	73
Russell	Barnes	429	74
Meade	Barnes	436	75
Sherman	County	441.1	76
Kingman	Barnes	441.1	77

County	Law	Score	Rank
Miami	General	448	78
Jackson	General	450	79
Rooks	General	464	80
Hamilton	Barnes	467	81
Phillips	General	471	82
Cloud	General	474[1]	83
Wichita	County	474[1]	84
Gray	Barnes	474[1]	85
Decatur	County	474[1]	86
Cherokee	County	484	87
Lane	County	496[1]	88
Sheridan	County	496[1]	89
Washington	General	504	90
Hodgeman	County	505	91
Chautauqua	General	514	92
Grant	County	515	93
Smith	General	523	94
Republic	General	558	95
Rawlins	County	564	96
Stevens	General	580	97
Stanton	County	587	98
Graham	General	594	99
Morris	General	617	100
Cheyenne	County	619	101
Kiowa	County	630	102
Gove	General	679	103
Haskell	County	705	104
Morton	General	719	105

[1] Where a tie occurs in the score the rank is decided by an additional test, namely, science courses and laboratory equipment.

DISTRIBUTION BY TERTILES AND HALVES

Table 10

The following table shows the number of counties and the percentage of the total number of counties under each law which are found in the first, second and third tertiles according to table nine.

Law Barnes	Percent	Law County	Percent	Law General	Percent
		First Tertile			
24	61.5	6	22.2	5	12.8
		Second Tertile			
9	23.1	7	25.9	19	48.7
		Third Tertile			
6	15.4	14	51.9	15	39.5
39	100	27	100	39	100

Table 11

Table eleven follows table ten except that the counties are divided into halves rather than tertiles.

Law Barnes	Percent	Law County	Percent	Law General	Percent
		Upper Fifty-three Counties			
30	76.9	10	37	13	33.3
		Lower Fifty-two Counties.			
9	23.1	17	63	26	66.6
39	100	27	100	39	100

CONCLUSIONS.

The statistics from which the conclusions of this study will be deduced are furnished by the principals and superintendents of the schools under investigation and compiled in the office of the state superintendent of public instruction.

The report issued biennially by this officer is exhaustive and contains by far the most reliable school statistics which are available.

Mere figures and tables abstracted from the scene of action and complied with rigid mathematical accuracy, which makes no allowance for peculiar conditions and permits of no explanations, may not always be thoroughly dependable sources from which to form opinions and determine rules of action. But in an agricultural state where homeogeneous population and common interests and an almost ideal distribution of counties of each type both as to their geography and numbers there seem to be reasons to adopt the verdict of mathematical measurements with a large degree of finality on the adequacy of the three laws under consideration.

The period of time embraced within the years from

1876 when permission was granted to cities of the first and second class to maintain a high school to 1915 when the same privilege was extended to rural districts, marks the complete absorption of the high school into the common school system. To what further lengths society will find it profitable to extend the common school system in the interests of the commonwealth of the state is a mere matter of conjecture. But the increase of economic outlay which has been greatly out of proportion to the increase of attendance can be justified only by the adoption of more efficient methods and a superior social output.

The legal machinery by which secondary schools are built and maintained represents various levels of efficiency. If one law has stimulated growth another seems to have interferred with it. The law of 1876 which gave the city districts full liberty and authority in all matters pertaining to methods of taxation and administration affords an example of the conditions under which the natural evolution of the secondary school took place in the absence of artificial stimuli. The law of 1888 and that of 1905 are

obviously attempts to improve on the earlier law.

Table 10 which shows the percentage of the counties of each group arranged in order of their rank in each tertile, places 65.5% of "Barnes" law counties, 22.2% of General law counties and 12.8% of those which have county high schools, in the first tertile. Since the rank for each county is given only after seven tests have been applied to ascertain its fitness educationally, it seems reasonable to conclude that the "Barnes" law has been far more effective in the field of secondary education than either of the other two. If the percentage of counties in each group which appear in the first tertile is a safe basis for estimating the strength of the law the "Barnes" law stands first, the General law second and the County law third.

If the figures of table eleven are consulted, which divides the counties into an upper and lower half, the advantage which the "Barnes" law commands is shown by the fact that thirty of its thirty-nine counties, seventy-six and nine tenths percent of the

total number, appear in the upper half and by the same division the county law shows a slight advantage over the general. The strength and weakness of the three forms of legislation may be briefly summarized.

The general law which provided the first high schools of the state claims particular merit from the fact that it served as a medium for the natural expression of educational sentiment. Although no city of the first or second class was compelled directly or indirectly to build a high school there was no city of either class which did not. Nor is there any indication that the schools which were built did not maintain average standards of scholarships.

The weakness of the law lay in the fact that the city was the unit of taxation and students who lived within the adjacent area were excluded from the benefits of the high school except by payment of tuition. This defect was evidently more pronounced a decade ago than at present for there seems to be very little indication that students from rural districts are deprived of an education on account of tuition fees.

In 1914 the counties which are governed by this law enrolled 8.03% of their school population in high school as opposed to 8.01% and 9.19% in County and "Barnes" law counties respectively.

A weakness of the general law which is rarely mentioned is the inability of the small city to establish a school of standard secondary grade without the aid of the circumjacent lands for taxation purposes. Many poor high schools in cities of the second and third class are the result of this condition. It was for the purpose of correcting both of these defects that the county laws were enacted. The theory upon which its authors proceeded was that a single high school in the county would have abundant means for support, and every child in the county could attend an institution of superior grade without tuition. The theory was correct in that better schools were established. County high schools as a class are perhaps the most effective educational institutions in the state in so far as those who attend them are concerned. These schools afford an equipment and manifest a spirit which has attracted

to them favorable attention from all sections of the state. But it is obvious that an institution which collects its tax for support equally from all parts of the county should in turn minister alike to all parts. But of the 9,198 pupils which are enrolled in counties with county high school only 45% are found in the County high schools. The much larger proportion, 55%, attend other high schools of the county which the taxpayers support in addition to a central high school. (cf. Table 1 A.) This type of school has compelled the resident of the small town within the county to face the horns of a delemma. Either he must send his child to another town to school, which he feels he cannot afford to do, or he must erect, equip and maintain a school at home in addition to the central school. This also he is reluctant to do. It will be admitted that the county high school is well adapted to sparsely settled counties with low valuations since without including the entire area of the county for taxation no creditable high school would be possible. But the high

school has become a part of the common school. Parents urge their children to attend school so long as they may remain at home and do so. The high school has become and doubtless will remain a community institution. But the high schools in the small towns of those counties which support county high schools are on the whole the poorest institutions in the state according to the findings of this study. It is in respect to that portion of the county which it can never expect to reach that the county high school becomes an obstacle in the way of natural development. The county supports it but it also supports other schools for 55% of high school attendance. The "Barnes" law or county-aid system was not enacted until forty years after the first and twenty years after the second law was spread upon the statute books. It recognized the strength and corrected the more patent error of each in the retention of the county as the taxing area and the provision for aid to the small town. Its appearance at a critical time when small high schools were springing up in great numbers has

made it of great service to secondary education. Its chief element of strength lies in the fact that before a community may receive help from the county it must first erect and equip a building and offer instruction to students in the first three years of its course. The initial effort on the part of the district has had a salutory effect and is a worthy provision of the law. The comparative ease with which funds are secured for the maintenance of "Barnes" law schools has led to charges of extravagance in expenditures of which in some few cases there seems little doubt. On the other hand the cases of extravagance are probably outnumbered by the instances of parsimony. Under the provisions of the "Barnes" law enough money became available to place the high schools of the smaller towns on a firm and permanent basis. Such has been the development of the schools of this type that in the seven tests which have been applied these schools have ranked above those of either of the other two types in six respects and were close competitors in the seventh.

We are therefore obliged to conclude that the

"Barnes" law has best served the educational interests of the state. The general law is worthy of second place. The county high school law must be ranked third. The fairest consideration must look upon it either as an anachronism or as founded on a principle uncongenial to the growing spirit in secondary education which declares the high school a part of the common school system, an institution supported and patronized by the community.